

**Amendments to the Specification:**

Please replace the paragraph beginning at page 1, line 4 up from the bottom, with the following rewritten paragraph:

A cellular solid is made up of an interconnected network of solid struts or plates which form the edges and faces of cells, examples of which are shown in Figure 1. See also, for example, L. J. Gibson and M. F. Ashby, Cellular Solids, Pergamon Press, First Edition 1988. The simplest is a two-dimensional array of polygons, which pack to fill a plane area and are typically called honeycombs. See Fig. 1-2(a). More commonly, the cells are polyhedra, which pack in three dimensions to fill space. Such three-dimensional cellular materials are called foams. If the solid of which the foam is made is contained in the cell edges only (so that the cells connect through open faces), the foam is said to be open-celled or reticulated. See Fig. 1-(b), and Fig. 2 (b). The cell edges or boundaries of the cell of open-cell or open-pore foams are often called ligaments. If the faces are solid too, so that each cell is sealed off from its neighbors, it is said to be closed-celled. See Fig. 2(c). Foams can contain, for example, both open- and closed-cells in the same body. Foams are differentiated by their material or materials of fabrication, whether open or closed, the number of cells per linear dimension and other parameters. A typical designation of cell size is cells or pores per linear inch (ppi).

Please replace the paragraph beginning at page 2, line 5 down from the top, with the following rewritten paragraph:

Foams can be made by a number of processes and from a variety of materials. See, for example, A. J. Sherman et al, "Refractory Ceramic Foams: A Novel, New High-Temperature Structure", Ceramic Bulletin, Vol. 70, No. 6, 1991, which is hereby

incorporated herein by reference. One process for fabricating open-pore foams involves coating/infiltrating an open-pored reticulated vitreous carbon foam by chemical vapor deposition/infiltration (CVD/CVI). This method allows the formation of foams of many different materials, including metals and ceramics. In this case the vitreous carbon foam is used as a skeleton for the CVD material and the skeleton is often, but not necessarily retained. Figure 2 1 shows a reticulated rigid tantalum foam made in this way.

Please replace the paragraph beginning at page 3, line 4 down from the top, with the following rewritten paragraph:

The attachment of a skin or skins to foam materials had previously often been problematic because the surface of the foam material is composed of a multitude of discreet points or small areas rather than a continuous surface, which would lend itself to bonding or brazing or other similar attachment means. In addition, the difficulty of attachment is a function of the pores per inch (ppi) and the physical size of the ligaments or other attachment areas. As shown, for example, in Fig. 2 1, the area which must be bridged by the skin between adjacent ligaments is often at least five times or more the thickness of the ligaments. This is especially problematic when the skins are subjected to structural loads or hermetic seals are required, since any unattached areas weaken the structure or are points of potential leaks. In addition, it is difficult to detect areas that are not attached since they are hidden by the skins. Also repair of unbonded areas usually requires removal of the skin and reattachment. Even more problematic have been the cases where the surface of the porous material is not of simple geometry such as a flat surface or a cylinder. In these cases it had

previously been nearly impossible to get total surface attachment of the skin to the porous material. In addition, when the skin and the porous material are made of different materials or when no compatible bonding agent is available, the optimum structure could not be formed.

Please insert the following new paragraph beginning at page 11, line 8 down from the top:

Fig. 1 is a scanning electron microscope image of a reticulated tantalum foam substrate suitable for use as a reticulated foam substrate according to the present invention.

Please replace the paragraph beginning at page 11, line 8 down from the top, with the following rewritten paragraph:

Fig. 12(a) is a photograph taken through a microscope of a regular rigid honeycomb substrate suitable for use as a substrate according to the present invention.

Please replace the paragraph beginning at page 11, line 11 down from the top, with the following rewritten paragraph:

Fig. 12(b) is a photograph taken through a microscope of a rigid reticulated foam substrate suitable for use as a substrate according to the present invention.

Please replace the paragraph beginning at page 11, line 13 down from the top, with the following rewritten paragraph:

Fig. 12(c) is a photograph taken through a microscope of a rigid closed cell foam substrate suitable for use as a substrate according to the present invention.

Appl. No. 09/441,627  
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Please cancel the paragraph beginning at page 11, line 15 down from the top.